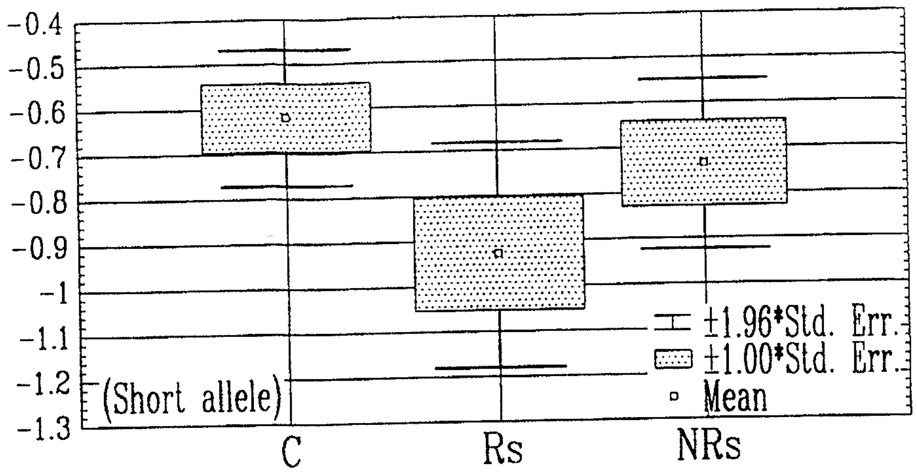

FIG. 1A

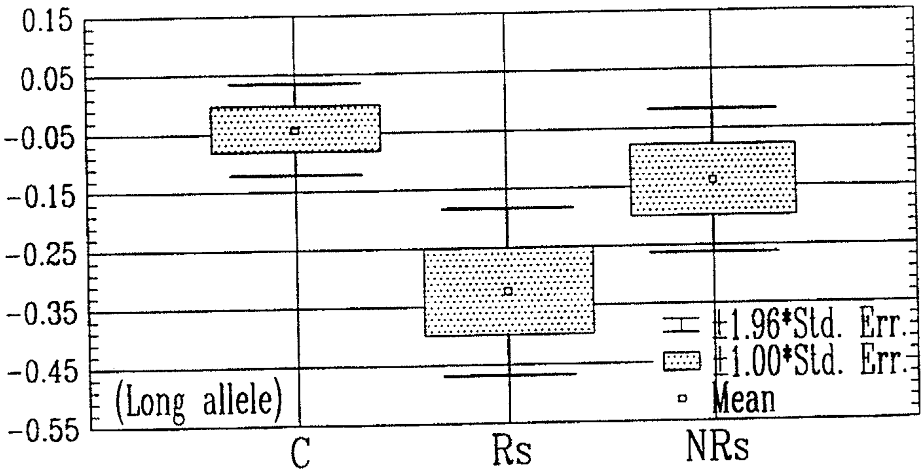

FIG. 1B

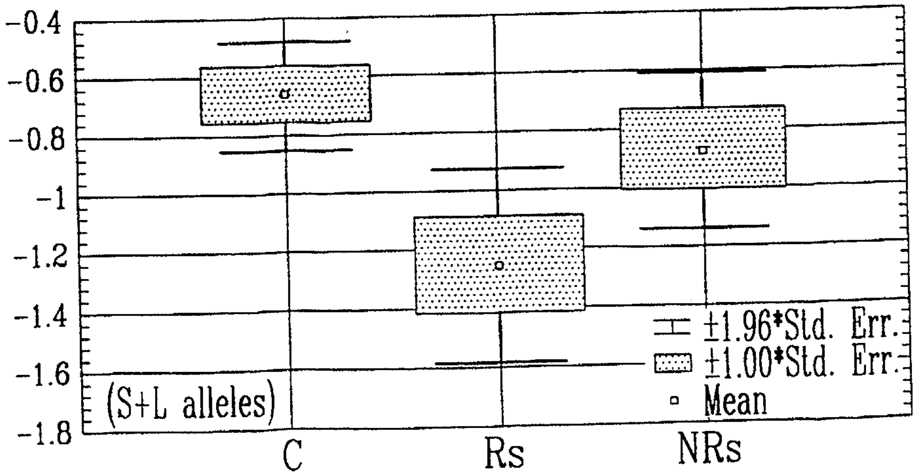

FIG. 1C

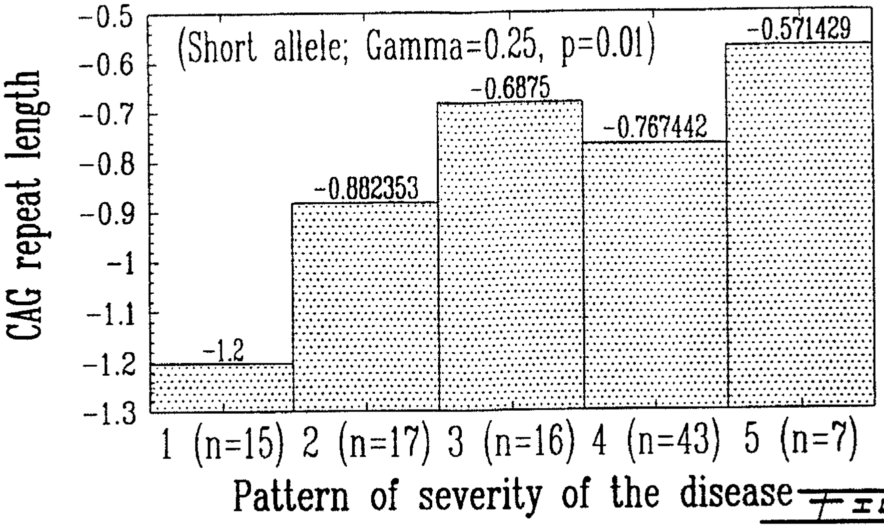

FIG. 2A

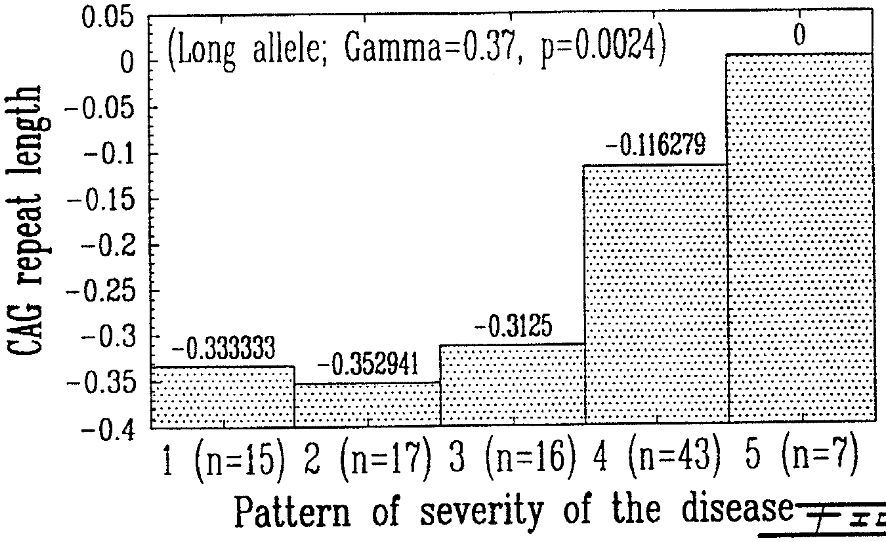

FIG. 2B

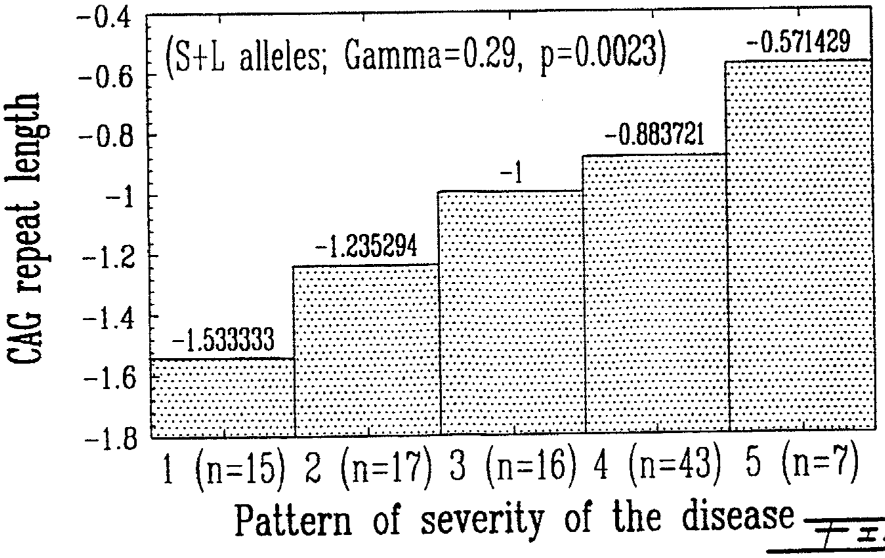

FIG. 2C

homology between the human GCT10D04 sequence and the mouse GT1 gene

```
                                130       140       150       160       170       180
D29801M (1>600)       →  AGGGCAGCCACTTTCCCCAGCATTCCCAGTCCTTCCCTACCTCCTCCACTTATGCCCCAA
GCT10D04 (1>320)      ←                               TCCTTCCCCACCTCCTCCACCTACTCCTCCT
                         AGGGCAGCCACTTTCCCCAGCATTCCCAGTCCTTCCCTACCTCCTCCACYTAYKCCYCMW

                                190       200       210       220       230       240
D29801M (1>600)       →  CAGTG-CAGGGTGGTGGGCAGGGGGCCCACTCCTACAAGAGCTGCACAGCACCATCTGCC
GCT10D04 (1>320)      ←  CTGTCCCAGGGTGGTGGGCAGGGGGCCNACTCCTATAAGAGTTGCACAGCACCGACTGCC
                         CWGTGcCAGGGTGGTGGGCAGGGGGCCCACTCCTAYAAGAGYTGCACAGCACCRWCTGCC

                                250       260       270       280       290       300
D29801M (1>600)       →  CAGCCTCATGATAGGCCGATGAGTGCCAATGCGAACCTGGCTCCAGGGCAACGGGTCCAG
GCT10D04 (1>320)      ←  CAGCCCCATGACAGGCCGCTGACTGCCAGCTCCAGCCTGGCCCCGGGGCAGCGGTCCAG
Oligo SCZ-15 (1>24)   →                                               GGGGCAGCGGTCCAG
                         CAGCCYCATGAYAGGCCGMTGASTGCCARYKCSARCCTGGCYCCRGGGCARCGGGTCCAG
```

FIG_3A

09/508821

```
                               310       320       330       340       350       360
D29801M (1>600)       → AATCTTCACGCTTACCAGCCTGGCCGCCTTGGCTACGA----------------------
GCT10D04 (1>320)      ← AATCTTCATGCCTACCAGTCGGGCCGCCTCAGCTATGACCAGCAGCAGCAGCAGCAGCAG
Oligo SCZ-15 (1>24)   → AATCTTC
                        AATCTTCAYGCYTACCAGYCKGGCCGCCTYRGCTAYGAccagcagcagcagcagcagcag

                               370       380       390       400       410       420
D29801M (1>600)       → --------GCAGCAGCAGCAAGCACTTCAAGGCCGTCACCACACCCAGGAAACACTCCAC
GCT10D04 (1>320)      ← CAGCAGCAGCAGCAGCAGCAAGCCCTTCAGAGCCGGCACCATGCCCAGGAAACCCTCCAT
                        cagcagcaGCAGCAGCAGCAAGCMCTTCARRGCCGKCACCAYRCCCAGGAAACMCTCCAY

                               430       440       450       460       470       480
D29801M (1>600)       → TACCAGAACCTCGCCAAGTACCAACACTATGGACAGCAAGGCCAGGGCTACTGTCCA-CC
GCT10D04 (1>320)      ← TACCAAAACCTCGCCAAGTATCAGCACTACGGGCAGCAAGGCCAGGGCTACTG-CCAGCC
Oligo SCZ-16 (1>23)   ←                       AGCACTACGGGCAGCAAGGCCAG
```

FIG. 3B

09/508821

ggatccagcaggcccaaggggatgagggagcggaaattgctctgctaaatgcttttgagctgtca
ggaagggctgggagtgatgggtgggggacattggggaggagctggcaatgggcggggggggg
gcgggtagctccccagtgacctggcgctgggcagccggttttgcctcccgcatcagtggccgtcctt
ggcaagactcagctgcaggcgatgtgggagcgggaattacagagcacacctccctgacacaga
agttgtcaatatgcgcacagctggtggggaggctcaggcgaagggggggactattaagagctgcg
cgggggagcaggcagggtggggaggtgggtgggagggtgctttctgaggcaaaaggaagtgg
cccgtctgaatcgctcatcctctgccccctccctgcccatcctcccctccctccttccctccctccctcc
cttcctttttcttttcaCAGATAACCAGCCCGAGTCATGCAGTCTTTTCGAGAA
AGGTGTGGTTTCCATGGCAAACAACAGAACTACCAGCAGACCTCG
CAGGAAACATCACGCCTAGAGAATTACAGGCAGCCGAGTCAGGCC
GGGCTAAGCTGCGACCGGCAGCGGCTGCTCGCCAAGGACTATTAT
AACCcGCAGCCTTACCCGAGCTATGAGGGTGgCGCTGGCACGCCcT
CTGGCACTGCAGCCgCGGTGGCCGCCGACAAGTACCACCGAGGC
AGCAAGGCCCTGCCCACACAGCAAGGCCTGCAGGGGAGGCCGGC
TTTCCCTGGcTACGGCGTCCAGGACAGCAGCCCCTACCCAGGCCG
CTATGCTGGTGAGGAGAGCCTTCAGGCTTGGGGGGCCCCACAGC
CACCACCCCCACAGCCGCAGCCACTACCTGCAGGGGTGGCCAAGT
ATGATGAGAACTTGATGAAAAAGACAGCAGTGCCCCCCAGCAGGC
AGTATGCAGAGCAGGGCGCCCAGGTGCCCTTTCGGACTCACTCCC
TGCACGTCCAGCAGCCACCGCCGCCCCAGCAGCCCCTGGCATACC
CCAAGCTCCAAAGGCAGAAGCTGCAGAACGACATTGCCTCCCCTC
TGCCCTTCCCCCAGGGTACCCACTTTCCTCAGCATTCCCAGTCCTT
CCCCACCTCCTCCACCTACTCCTCCTCTGTCCAGGGTGGTGGGCA
GGGGGCCCACTCCTATAAGAGTTGCACAGCACCGACTGCCCAGCC
CCATGACAGGCCGCTGACTGCCAGCTCCAGCCTGGCCCCGGGGC
AGCGGGTCCAGAATCTTCATGCCTACCAGTCGGGCCGCCTCAGCT
ATGACCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG
CAAGCCCTTCAGAGCCGGCACCATGCCCAGGAAACCCTCCATTAC

Fig. 4A

CAAAACCTCGCCAAGTATCAGCACTACGGGCAGCAAGGCCAGGGC
TACTGCCAGCCGGACGCAGCCGTCCGGACCCCAGAGCAGTACTAC
CAGACCTTCAGCCCCAGCTCCAGCCACTCACCCGCCCGCTCCGTG
GGCCGCTCACCTTCCTACAGTTCCACACCGTCGCCGCTGATGCCA
AACCTGGAGAACTTTCCCTACAGCCAGCAGCCGCTCAGCACCGGG
GCCTTCCCCGCAGGGATCACTGACCACAGCCACTTCATGCCCCTG
CTCAATCCCTCCCCAACGGATGCCACCAGCTCTGTGGACACCCAG
GCTGGCAACTGCAAGCCCCTTCAGAAGGACAAGCTCCCTGAGAAC
CTGCTGTCGGATCTCAGCCTGCAGAGCCTCACGGCGCTGACCTTA
CAGGTGGAGAACATCTCCAACACCGTCCAGCAGCTGCTGCTCTCC
AAGGCTGCTGTGCCGCAGAAGAAAGGTGTCAAGAACCTCGTGTCC
AGGACCCCAGAGCAGCATAAAAGCCAGCACTGCAGCCCCGAagGG
AGCGGCTACTCAGCCGAGCCCGCAgGCACACCGCTGTCAGAGCCG
CCGAGCAGCACGCCACAGTCCACGCATGCGGAGcCGCAGGAGGC
CGACTACCTGAGCGGCTCCGAGGACCCACTGGAGCGCAgcTTCCT
CTACTGCAACCAGGCCCGTGGCAGCCCTGCCAGGGTCAACAGCAA
CTCGAAGGCCAAGCCCGAGTCCGTGTCCACCTGTTCTGTGACCTC
TCCTGACGACATGTCCACCAAATCTGACGACTCCTTCCAGAGCCTA
CACGGCAGTCTGCCGCTCGACAGCTTCTCCAAGTTCGTGGCGGGT
GAGCGGGACTGTCCGCGGCTGCTGCTCAGCGCCCTGGCACAGgA
GGACCTGGCCTCCGAGATCCTGGGGCTGCAGGAAGCCATCGGTG
AGAAGGCCGACAAAGCTTGGGCTGAAGCACCCAGCCTGGTCAAGG
ACAGCAGCAAGCCACCCTTCTCGCTGGAGAACCACAGCGCCTGCC
TGGACTCTGTGGCCAAGAGTGCGTGGCCCCGGCCTGGGGAGCCG
GAGGCCCcTGCCCGACTCCTTGCAGCTGGACAAGGGCGGCAATGCC
AAGGACTTCAGCCCAGGGCTGTTTGAAGACCCTTCCGTGGCCTTCg
cTACGCCTGACCCCAAAAAGACAACTGGTCCTCTCTCCTTTGGTAC
CAAGCCCACCCTTGGGGTTCCTGCTCCAGACCCCACTACAGCAGC

FIG. 4B

TTTTGACTGTTTCCCGGACACAACCGCTGCCAGCTCAGCGGACAG
CGCCAACCCCTTTGCCTGGCCAGAGGAAAACCTGGGGGATGCTTG
TCCCAGGTGGGGATTGCACCCTGGCGAGCTTACCAAGGGCCTGGA
GCAGGGTGGGAAGGCCTCAGATGGCATCAGCAAAGGGGACACCC
ATGAGGCTTCGGCCTGCCTGGGCTTCCAGGAGGAGGACCCCCCTg
GGGAGAAGGTGGCCTCGTTGCCCGGGGACTTCAAGCAGGAGGAG
GTGGGTGGGGTGAAGGAGGAGGCAGGTGGGCTGCTGCAGTGCCC
CGAGGTGGCCAAGGCTGACCGGTGGCTGGAGGACAGCCGGCACT
GCTGTTCCACCGCCGACTTCGGGGACCTCCCACTGCTGCCACCCA
CCAGCAGGAAGGAGGACCTGGAAGCTGAGGAGGAGTACTCCTCC
CTATGTGAGCTCCTGGGCAGCCCCGAGCAGAGGCCTGGCATGCA
GGACCCGCTGTCACCCAAGGCCCCACTCATCTGCACCAAGGAGGA
GGTGGAGGAGGTGCTGGACTCCAAGGCCGGCTGGGGCTCTCCGT
GCCACCTCTCAGGGGAGTCCGTCATCCTGCTGGGCCCTACAGTGG
GCACCGAGTCAAAGGTCCAGAGCTGGTTTGAGTCCTCTCTGTCACA
CATGAAGCCAGGTGAAGAGGGGCCTGATGGGGAGCGAGCTCCAG
GGGATTCCACCACCTCGGACGCCTCTCTGGCCCAGAAGCCCAACA
AGCCTGCTGTGCCCGAGGCGCCCATCGCAAAGAAAGAGCCTGTGC
CACGGGGCAAAAGCTTACGGAGCCGTCGGGTGCACCGGGGGCTG
CCCGAGGCCGAGGACTCCCCATGCAGGGCACCAGTGCTGCCCAA
AGACCTCTTGCTCCCTGAATCCTGCACAGGGCCCCCCCAGGGACA
GATGGAAGGGGCTGGAGCCCCAGGCCGGGGGGCCTCGGAAGGG
CTCCCCAGGATGTGTACTCGTTCTCTCACGGCCCTGAGTGAGCCC
CGCACGCCCGGACCCCCAGGCCTGACCACCACCCCTGCACCCCC
AGACAAACTGGGGGGCAAGCAGCGAGCCGCCTTCAAGTCGGGCA
AGCGGGTGGGGAAGCCCTCACCCAAGGCTGCCTCCAGCCCCAGC
AACCCGGCCGCCCTGCCTGTGGCCTCCGACAGCAGCCCGATGGG
CTCCAAGACCAAGGAGACAGACTCACCCAGCACGCCTGGCAAGGA

FIG. 4C

```
CCAGCGCTCCATGATCCTTCGGTCACGCACCAAAACCCAGGAGAT
CTTCCACTCCAAGCGGCGGAGGCCCTCTGAGGGCCGGCTCCCCA
ACTGCCGTGCCACCAAGAAGCTCCTCGACAACAGCCACTTGCCCG
CCACATTCAAGGTCTCCAGCAGCCCCCAGAAGGAGGGCAGGGTGA
GCCAGCGGGCAAGGGTCCCCAAACCTGGTGCAGGCAGCAAGCTC
TCTGACCGGCCCCTCCATGCGCTCAAAAGGAAGTCGGCCTTCATG
GCGCCGGTCCCCACCAAGAAGCGGAACCTGGTCTTGCGgcacgGCA
GCAGCAGCAGCAGCAACGCCAGTGCAATGGGGGAGATGGAAGG
AGGAGAGGCCTGAGGGTTCCCCCACCCTCTTCAAGAGGATGTCTT
CTcCCAAGAAAGCCAAGCCCACCAAGGGCAATGGCGAGCCTgCCA
CAAAGCTcCCACCCCCGgAGACCCCCATTCCTGCcTCAAGCTCGCC
TCTCGGCAgCCTTCCAGGGGGCCATGAAGACCAAGGTGCTGCCAC
CCCGGAAGGgCCGGGGCCTgAAGCTGGAAGCCATCGTGCAGAAGA
TCACCTCGCCCAGCCTCAAGAAGTTCGCATGTAAAGCGCCAGGGG
CCTCTCCTGGTAATCCTCTGAGCCCATCCCTTTCCGACAAAGACCG
TGGGCTCAAGGGTGCTGGGGGCAGCCCAGTGGGGGTGGAAGAAG
GCCTGGTAAATGTGGGCACCGGGCAGAAGCTCCCAACTTCTGGGG
CTGATCCGTTATGCAGAAATCCAACCAACAGATCCTTAAAAGGCAA
ACTCATGAACAGTAAGAAACTGTCTTCTACTGACTGTTTCAAAACCG
AGGCCTTCACATCCCCGGAGGCCCTGCAGCCTGGGgGGACTGCCC
TGGCGCCTAAGAAGAGGAGCCGgAAAGGCCGGGCAGGGGCCCAT
GGACTCTCCAAAGGCCCGCTGGAGAAGCGGCCCTATCTTGGCCCG
GCTCTGCTCCTGACTCCCCGAGACAGGGCCAGTGGCACACAAGGG
GCCAGTGAGGACAACTCTGGTGGAGGAGGCAAGAAGCCAAAGATG
GAGGAGCTGGGCCCTGCCTCCCAGCCCCCGGAGGGCAGGCCCTG
CCAGCCCCAGACAAGGGCACAGAAACAGCCAGGCCACACCAACTA
CAGCAGCTATTCCAAGCGGAAGCGCCTCACTCGGGGCCGGGCCA
AGAACACCACCTCTTCACCCTGTAAGGGGCGTGCCAAGCGACGAC
```

Fig. 4D

9/9

GACAACAGCAGGTGCTGCCCCTGGATCCCGCAGAGCCTGAAATCC
GCCTCAAGTACATTTCCTCTTGCAAGCGGCTGAGGTCAGACAGCC
GGACCCCCGCCTTCTCACCCTTCGTGCGGGTGGAGAAGCGAGAC
GCGTTCACCACCATATGCACTGTTGTCAACTCCCCTGGAGATGCGC
CCAAGCCCCACAGGAAGCCTTCCTCCTCTGCCTCCTCTTCCTCATC
CTCGTCCTCGTTCTCCTTGGATGCAGCCGGGGCCTCCCTGGCCAC
ACTCCCTGGAGGCTCCATCCTGCAGCCGCGGCCCTCCTTGCCCCT
CTCCTCCACGATGCACTTGGGGCCTGTGGTTTCCAAGGCCCTGAG
TACCTCTTGCCTTGTTTGCTGCCTCTGCCAAAACCCGGCCAACTTC
AAGGACCTTGGGGACCTCTGTGGGCCCTACTACCCTGAACACTGC
CTCCCCAAAAAGAAGCCAAAACTCAAGGAGAAGGTGCGGCCAGAA
GGCACCTGTGAGGAGGCCTCGCTGCCGCTTGAGAGAACACTCAAA
GGTCCCGAGTGTGCAGCTGCCGCCACTGCCGGGAAGCCCCCCAG
GTGACGGCCCAGCTGACCCGGCCAAGCAGGGCCCACTGCGCACC
AGTGCCCGGGGCCTGTCCCGGAGGCTGCAGAGCTGCTACTGCTG
TGATGGCCGGGAGGATGGGGGCGAGGAGGCAGCCCCAGCCGACA
AGGGTCGCAAACATGAGTGCAGCAAGGAGGCTCCGGCAGAGCCC
GGCGGGGAGGCCCAGGAGCACTGGGTGCATGAGGCCTGTGCCGT
GTGGACCGGCGGCGTCTACCTGGTGGCCGGGAAGCTCTTTGGGC
TGCAG

Fig. 4E